



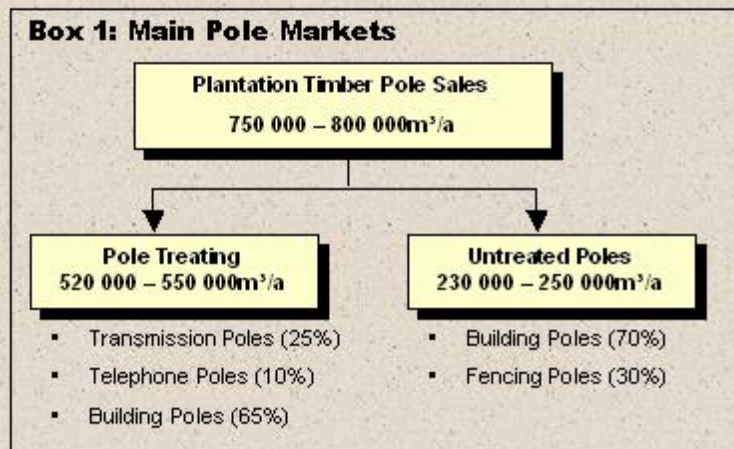
THE SA TIMBER POLE MARKET - A Sub-Sector Analysis -

INTRODUCTION TO THE SECTOR

The South African pole industry represents an important market for timber poles. Timber poles compete with mainly steel and concrete poles in building, fencing, electricity, transmission and fixed telephone line applications, and as such represent an indispensable product in the establishment of fixed infrastructure. Based on recorded plantation sales, the total average annual supply of poles to the South African market is estimated at 750 000 m³ to 800 000 m³. Many pole timber markets have, however, a fairly regional flavour, with smaller pockets of both commercial plantations and woodlots supplying the demands of local communities for building and fencing material.

MAIN TIMBER POLE MARKETS

The market for timber poles comprises two main types, i.e. treated and untreated poles. Important treated pole applications are the transmission and telephone poles with major customers being Eskom, Telkom and municipalities/metro councils.



This market is dominated by large companies such as Woodline, Thesens and Boland Wood Industries, supplying ± 85% of total demand. This market is highly competitive with cost pressure both from large customers and alternative pole types, e.g. concrete and steel.

The figure for pole treating can be regarded as reasonably accurate as +95% of formal treaters are licensed. A further ± 230 000 m³ of poles are sold untreated, mostly on a cash basis directly ex-plantations.

These are used by surrounding communities for building and fencing purposes. However, many problems are experienced, particularly in respect of the life span and strength of untreated poles.

VALUE-ADDED CHAIN FOR TIMBER POLES

Generally it is accepted that the supply of pole logs alone is not a worthwhile business due to its long-term nature and low returns. Models whereby growers participate, in any form, in downstream processing and/or retailing therefore need to be considered, especially for groups of smaller growers.

Average margins in treating operations are around 15 - 20%, but these operations need to be run at high capacity utilisation implying that adequate raw material supplies are a necessity.

Pole retailing operations are normally only found in larger metropolitan areas. These operations require large investments in real estate and also high volume turnovers, both factors being drawbacks for small businesses. Average margins in retailing are around 25 - 30%.

It is very evident that smaller pole treating operations need considerable backward integration (in the form of owning plantations or through formal supply agreements) to operate profitably.

Box 2: Building and Fencing Poles Value-Added Chain

Description of Stage	Value (R/m ³)
Standing logs	55
Logs at roadside	135
Logs delivered to plant (< 100 km)	175
Treated poles ex plant	700
Delivered to the market	
- Local (< 100 km)	750
- Distant (> 100 km)	800 - 900
Retail ex merchant	950 - 1200

COST STRUCTURE FOR POLE TREATING

Industrial preservation or treatment of wood uses toxic materials and is governed by regulations (R602 of 27 March 1986) as promulgated in terms of the Forest Act, 1984 (Act 122 of 1984). The South African Bureau of Standards (SABS) is responsible for implementing the regulations, and does so through SABS inspectors appointed in terms of Section 28 of the Standards Act (Act 29 of 1993).

The predominant preservation options in this country use Creosote and Copper Chromium Arsenate (CCA). These preservatives have been used for many years and are accepted as the most effective both from preservation and cost perspectives.

The market shares of the two main preservation options are roughly 64% Creosote and 34% CCA respectively. There are about 150 – 160 plants operating in South Africa, with 40 of these Creosote plants and 100 CCA plants. National capacity utilisation of Creosote plants is relatively high (+ 75%), but for CCA plants low (under 35%), implying far too many plants of the latter category.

The applicable SABS certification schemes for treated poles are SABS 753/754 for transmission and telephone poles, SABS 457 for building and agricultural poles and SABS 1288 for poles used in roofs and general construction applications.

The average (industry) cost structure of a formal pole treating operation shows the high percentage of material input costs to total costs ($\pm 50\%$), and it is clear that adequate and regular supply of timber and efficient relationships with chemical suppliers are key to successfully operating a treatment plant.

Box 3: Pole Treating Plant Cost Structure

Description	Cost (R/m ³)	%
Raw material	175	25
Chemicals	180	26
Salaries & Wages	50	7
Other Expenses	65	9
Overheads	110	16
Margins	120	17
TOTAL	700	100

Box 4: A Small Treating Plant



FORESTRY ENTERPRISE DEVELOPMENT OPPORTUNITIES

The transfer of DWAF Category B and C plantations, that are located in the provinces of Limpopo, Kwazulu-Natal and Eastern Cape, offer immediate FED opportunities for SMEs and rural communities. With the exception of Eastern Cape, almost all plantations are linked to DWAF pole treating plants, overcoming the hurdle of access to downstream processing facilities. The scattered nature of DWAF plantations in the Eastern Cape require a different solution that involves some form of co-operation between various future plantation owners.

Previous research and recent deliberations in Limpopo indicate that there is generally an under-supply of suitable treated poles to nearby markets in all of the regions. Ownership and management of DWAF's assets (plantations and plants) by private sector operators is imperative in order to successfully and profitably run timber pole enterprises in the various regions. Scope exists, through upgrading of the plants (inter alia obtaining SABS marks) to achieve higher value-added production of transmission or telephone poles and supply thereof to regional municipalities.

In the Eastern Cape opportunities exist to add value to an under-utilised resource. This would, however, necessitate considerable investment in new plants (e.g. one in Butterworth has been mooted) and intervention by development actors to facilitate joint venture arrangements between individual small growers/community woodlots in the region.

The industry body, South African Wood Preservers Association (SAWPA), is instrumental in promoting industry development and can be contacted at telephone (011) 974 1061 or e-mail: sawpa@global.co.za for more information.

This study was sponsored by DFID through the WFSP Forestry Programme, Forest Enterprise Development theme, and undertaken by the Institute of Natural Resources (INR). A copy of the full report on timber poles can be obtained from the Director, Forestry Policy and Strategy, Department of Water Affairs and Forestry tel: 012 336-7734; e-mail: 1al@dwaf.gov.za